

REMARKS

Allowance after reconsideration is thought to be in order.

Amended claim 2 and new claim 17 respond to the Examiner's formality rejection. It should be withdrawn.

New claim 18 relates to a combination of claims 1, 8 and 9.

The present invention is an at least three-layer laminated sheet which is obtained by laminating acrylic resin layers containing insoluble acrylic resin particles on both surfaces of a acrylic resin layer, as described in claim 1.

Claims 1, 2, 5, 7, 8 and 16 define novel inventions over U.S. Patent 5,415,931 to Minghett et al.

Minghetti et al. ('931) disclose a film (sheet) made by cast polymerization of methyl methacrylate in which particles of polymethyl methacrylate are dispersed. Although a size of the particles added is about 0.1 mm to about 2.0 mm, preferably about 0.2 mm to about 0.5 mm, the particles absorb the syrup and expand to over 200% of their original volume. Further, the particle is inseparable from the matrix and becomes part of the continuous phase of the matrix in the sheet. See, col. 2, lines 20-52, col. 3., line 66 to col. 4, line 2, and col. 4, lines 60-63.

On the other hand, the insoluble particles used in the present invention have a particle size of about 1 to 100 μm and do not expand in a base resin and are insoluble in a base resin. Therefore, the particles have their particle size of 1 to 100 μm in the base resin. A boundary between the particle on the base resin can be distinguished in the resin layer (B).

Thus, a size and a shape of particles in a film of the present invention are different from those of Minghetti et al. '931.

An object of Minghetti et al. '931 is to obtain a sheet having a textured surface, and is not to obtain a sheet providing a molded article having smaller bias of thickness in secondary thermoforming. Therefore, Minghetti et al. '931 do not disclose or suggest a sheet and a method for obtaining a molded article having smaller bias of thickness in secondary thermoforming.

If the at least three layers comprise the same composition as asserted by the Examiner (Office Action, page 3), the laminate would correspond to a single layer sheet. It would not provide a molded article having effectively smaller bias of thickness in secondary

thermoforming as shown in Comparative Example 4 of the present invention. Further, this sheet would be expensive since expensive particles are dispersed in the whole sheet.

Claims 9-15 define unobvious inventions over the Minghetti reference, further in view of the Hatakeyama reference, U.S. Patent No. 5,804,287.

The Office Action concedes “[w]ith respect to claims 9-11, Hatakeyama does not teach [that the] base layer should comprise rubber-containing polymer.” Office Action, page 5.

“Applicants ... argue that Hatakeyama does not teach a three-layered film. The examiner agrees with the Applicants interpretation of the reference.” November 20, 2000 Advisory Action, page 3, lines 4-5.

“Applicants further agree that Hatakeyama does not teach the presence of methyl methacrylate resin particles. The examiner agrees with Applicant’s interpretation.” November 20, 2000, Advisory Action, page 2, last paragraph. Hatakeyama et al. also admittedly “do not specifically state that ... the resin layer (i.e., layer A) contains the rubber-containing polymer.” June 26, 2000, Final Rejection, page 5, lines 1-2.

Hatakeyama et al. further admittedly “do not specifically state that the acrylic film (i.e. layer A) contains methyl methacrylate resin particles.” June 26, 2000 Final Rejection, page 5, lines 1-2.

In view of the admitted absence of an effective teaching in the art, Applicants request a Declaration from the Examiner setting forth the facts needed to make the rejection. Otherwise, they respectfully request that the rejection be withdrawn.

Claims 1, 2, 5 and 9-15 define unobvious inventions over the Hatakeyama et al. reference in view of the Minghett’s reference.

The Hatakeyama et al. reference discloses an acrylic film for an acrylic-laminated injection molded article. After the acrylic film is formed to the three-dimensional shape by vacuum molding, the base resin is injected and the acrylic film and the base resin are simultaneously melt-integrated. In such molded article, smaller bias of thickness is not particularly requested. Therefore, the Hatakeyama reference et al. does not disclose a sheet and a method for obtaining a molded article having smaller bias of thickness in secondary thermoforming. That is, the Hatakeyama et al. reference does not disclose an at least three-

layer laminated sheet which is obtained by laminating acrylic resin layers containing insoluble acrylic resin particles on both surfaces of a acrylic resin layer.

The film according to the Minghetti et al. reference is from the layer (B) of the present invention. The Minghetti et al. reference does not disclose or suggest an at least three-layer laminated sheet. The Hatakeyama et al. reference does not disclose and suggest a layer containing acrylic resin particles and a three-layer laminated sheet. Neither the Minghetti et al. nor the Hatakeyama et al. reference disclose or suggest any awareness or concern that about smaller bias of thickness. Accordingly, the present invention would not have been obvious over Hatakeyama et al. in view of Minghetti et al.

Applicants therefore respectfully submit that all rejections should be reconsidered and withdrawn.

Respectfully submitted,

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APPENDIX

Amendments to existing claims:

2. (Amended) The laminated extruded resin sheet comprising a methyl methacrylate resin according to Claim 1, wherein the methyl methacrylate resin in the layer (A) and the layer B is a resin containing 50% by weight or more of a methyl methacrylate polymer or a copolymer comprising 50% by weight or more of methyl methacrylate unit and a monofunctional unsaturated monomer unit as a constituent unit.

New claims 17-21 are added.